

Meeting 4/27/05 SRC Subcommittee on Laser Safety

Present: Joel Ager (MSD), Ted de Castro (EHS), Marc Hertlein (CSD), Richard Kadel (PHNSD), Larry McLouth (EHS), Robert Schoenlein (MSD), Neil Landau DOE/BSO

Agenda:

- (1) Proposed revisions to Pub 3000 - wording of eyewear policy, AHD renewals (Ted)
- (2) When should people be added to AHDs (ALS users, visitors, training period) and are AHDs being used as a substitute for specific training on laser systems?
- (3) LSO lab visits - April 30 deadline, visits to campus labs etc. (Ted, Ed)
- (4) Vendor alignment of lasers - Procurement Policy details and implementation (Ted, Gary)
- (5) DOE Laser Safety Report – verification of labs meeting safety expectations (Neil)
- (6) Use of laser lights and interlocks for lab security when lasers are off.

Minutes:

- (1) The committee agreed to propose to the Safety Review Committee the following changes to Pub3000, Ch 16:

Current Policy: Pub3000, Ch16, Appendix B, pg. 3

Eyewear

Laser Protective Eyewear must be worn whenever there is an open beam anywhere in the room (this of course includes during alignment). You must wear laser protective eyewear to view diffuse reflections from viewing devices.

Proposed Revised Policy: Pub3000, Ch16, Appendix B, pg. 3

Appropriate laser protective eyewear MUST be worn by all persons within the Nominal Hazard Zone (NHZ) whenever there is an open Class 3B or Class 4 beam. The NHZ is considered to be the entire room or lab in which the laser is located unless otherwise specified in the AHD. Violation of this policy is cause for a STOP WORK action.

ANYONE witnessing a violation of this policy has the right and the obligation to initiate a STOP WORK action and report it to the LSO and division management.

Regarding renewals of AHDs – Ted de Castro discussed this with John Seabury. The plan is to require that all AHDs be formally re-issued (with a complete review by EH&S etc.) every five years. AHDs without significant changes may be automatically renewed annually, but only for a total of four years, before re-issuing is required. These changes will be implemented in the next revision of Pub3000 Ch6.

- (2) Adding people to AHDs: Ted de Castro suggested that the list of users on laser AHDs be implemented as a table. See example below:

Name	Training Date	Authorized Laser Use (hands-on training)	
		Un-supervised	Supervised

The boxes “Un-supervised” and “Supervised” are to be initialed and dated by the authorized laser user who is either (a) providing the *direct* supervision for a new user who has not had sufficient hands-on training for a particular laser system, or (b) has provided the hands-on training necessary for a new user to operate the laser without direct supervision.

This serves dual purposes. First, it provides clear documentation of hand-on training. Second, it provides documentation for new or temporary laser users who must operate under the direct supervision of an authorized laser user. It was suggested that a “standard” table of this type be used on all laser AHDs.

(3) Approximately 20 out of 63 laser lab visits have been completed. It was suggested that these required visits be entered in the LCATS database so that laser supervisors get regular reminders that they need to fulfill this requirement. One action item for the LSO is to compile photos (and any other useful information, drawings etc.) of laser enclosures that could be shared with laser users in order to facilitate the use of enclosures in all laser laboratories.

(4) The standard subcontract was discussed and a modified version will be used in all P.O.s to laser vendors. Purchases will be segregated according to laser class, and the modified contract will include the following statement:

To preclude accidents, the LBNL eyewear policy is that whenever there is an open class 3B or class 4 laser beam, everyone within the room/lab must correctly wear proper protective eyewear.

The vendor has provided information that states for service purposes, this laser is a class 3B so therefore the technician and everyone else in the room must comply with the previous provision.

(5) BSO will get support from ORNL site office, particularly for laser safety expertise. BSO verification process will depend on the response of LBNL and the verification will be to the LBNL established criteria.

(6) Laser lights/interlocks may be used even if the laser is not on at that particular time. The nature of the system is that if the interlock chain is broken, the laser turns off, and the warning light is extinguished (indicating that the environment is laser safe).